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| ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889 | | | EXAMINER OJINI, EZIAMARA ANTHONY | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/701,338

Applicant(s)

LUTZ, HELMUT

Examiner

Anthony Ojini

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to because in **figure 2** , the plastic wall 2b fails to show a **cross hatching**. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3,5-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 12, lines1-2, the expression "**Grinding machine for grinding grinding material by means of grinding bodies**" is a little bit confusing because of too many grindings.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-15, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (5,823,861) in view of Ditscherlein (4,850,151).

With respect to claims 1,6,12, Kobayashi et al. disclose a grinding machine comprising a stationary container (1); polyurethane a rotary disk (5) placed above a container base for forming a finite gap (S) with respect to the container wall (see fig. 2) the rotary disk being rotatable relative to the container (see fig. 2). Kobayashi et al. also disclose the size of the finite gap between the rotary disk and the container wall being smaller than the spacing of the disk from the container (see fig. 2).

Kobayashi et al. fail to disclose polyurethane a rotary disk (5) is resilient at least on its underside.

Ditscherlein discloses a rotary base (2) made of polyurethane plastic material (a form of resilient material) (see col. 2, line 9-12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Kobayashi et al. with polyurethane plastic material (a form of resilient material) in view of Ditscherlein so as to prevent any distortion during operation.

With respect to claim 2, Kobayashi et al. disclose a driving shaft (9) of the grinding disk passes in liquid-tight manner through the base of the container (see fig. 2).

With respect to claim 3, Kobayashi et al. disclose the upper side of the disk is rigid (see col. 5, lines 49-50 & fig. 2).

With respect to claims 5,7,8,9, Kobayashi et al. fails to disclose wherein the disk is made from resilient, flexible material; elastomeric plastic; rubber; felt; cotton fabric or resilient floor covering material.

Ditscherlein discloses a rotary base (2) made of polyurethane plastic material (a form of resilient material) (see col. 2, line 9-12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Kobayashi et al. with polyurethane plastic material (a form of resilient material) in view of Ditscherlein so as to prevent any distortion.

With respect to claims 10,11, 24, 26, Kobayashi et al. fail to disclose the optimum range as claimed by the applicant.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Kobayashi et al. with the optimum value as claimed by the applicant **so as to compensate effects of thermal expansions of rotary disk and the wall lining**, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claim 13, Kobayashi et al. disclose the disk has a raised circumferential edge (see fig. 2).

With respect to claim 15, Kobayashi et al. disclose the container include polyurethane lining (2).

With respect to claims 25,27, Kobayashi et al. disclose the disk has an upwardly inclined circumferential edge, an outer wall of the upwardly inclined circumferential edge following a contour of a portion container wall adjacent the upwardly inclined circumferential edge such that the finite gap has a constant width (see fig. 2).

With respect to claim 14, Kobayashi et al. fail to disclose a one-piece casing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Kobayashi et al. with a one-piece casing **so as to save cost**, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Claims 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. in view of Ditscherlein as applied to claim 1 above, and further in view of Lin (5,088,238).

With respect to claims 16,20,21, Kobayashi et al. fail to disclose a drive motor for the rotary disk is placed beneath the rotary disk and below the container and laterally of the container.

Lin discloses a drive motor (41) for the rotary disk (2) that is placed beneath the rotary disk and below the container and laterally of the container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Kobayashi et al. with a drive motor for the rotary plate that is placed beneath the rotary disk and below the container and laterally

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of the container in view of Lin so as to ensure a smooth rotation of the drive shaft and the rotary disk.

With respect to claims 17-19, Kobayashi et al. fail to disclose a drive for the disk has a gear between the drive motor and disk wherein the gear is positioned below the disk and wherein the drive is constructed as a gear motor integrated gear.

Lin discloses a drive for the disk has a gear set (44) between the drive motor (41) and the rotary disk (2) disk wherein the gear is positioned below the disk, and wherein the drive is constructed as a gear motor integrated gear.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Kobayashi et al. with a gear set that is between the drive motor and the rotary disk wherein the drive is constructed as a gear motor integrated gear in view of Lin so as to ensure a smooth rotation of the drive shaft and the rotary disk.

With respect to claim 22, Kobayashi et al. fail to disclose a motor is substantially at the same level as the top of the container.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Kobayashi et al. with a motor that is substantially at the same level as the top of the container **so as to prevent debris from falling into the motor**, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. in view of Ditscherlein as applied to claim 1 above, and further in view of Nishimura et al. (5,476,415) and Takemoto et al. (5,487,696).

With respect to claim 23, Kobayashi et al. fail to disclose a sealable outlet provided below the disk in the base of the container.

Nishimura et al. disclose a dry barrel-finishing machine comprising an outlet (24) provided below a rotary plate (9) disk in the base of the container (1).

Takemoto et al. disclose an apparatus having a sealable outlet (5,6) (see figs. 1,2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Kobayashi et al. with a sealable outlet provided below the disk in the base of the container in view of Nishimura et al. and Takemoto et al. so as to control flow of medium in the container through the outlet pipe.

Response to Amendment

Applicant's arguments filed 4/1/03 have been fully considered but they are not persuasive.

Applicant argues that U.S. Patent No. 5,823,861 to Kobayashi et al. "fails to disclose a resilient material at least on the underside of the rotating barrel". However, Ditscherlein discloses a rotary base made of polyurethane plastic material having a resilient material at least on its underside.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kobayashi et al. (6,379,233) and Gegenheimer (6,296,556) disclose centrifugal grinder respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Ojini whose telephone number is 703 305 3768. The examiner can normally be reached on 7 to 4 Tuesday-Friday with every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703 308 2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph J. Hail, III
Supervisory Patent Examiner
Technology Center 3700